

100-Watt Laser Parameters

CUTTING

Laser head: Standard Head (2")			
Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.5	50	90
Acrylic	2.5	40	90
Acrylic	5.0	18	90
Acrylic	10.0	5	90
Acrylic	20.0	1	90
Foam	17.0	8	90
Plywood	2.0	100	70
Plywood	4.5	35	90
Cardboard	1.9	200	75
Cloth	0.4	300	90
Leather	1.5	65	90
Rubber	4.0	8	90
Double Color Boards	1.5	60	90
Bamboo	7.0	15	90
Paper	0.1	300	30
Kraft paper	0.5	300	60
Cherry Wood	15.0	4	90
Plastics	/	/	90
Glass	/	/	/
Granite	/	/	/
Marble	/	/	/
Ceramic Cup	/	/	/
Rostone	/	/	/
Anodized Aluminum	/	/	/
Grip Tape	/	/	/

ENGRAVING

Laser head: Standard Head (2")			
Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	500	20	0.08
Acrylic	500	20	0.08
Bamboo	500	20	0.08
Plywood	500	20	0.08
Cardboard	500	20	0.08
Paper	500	12	0.08
Painted Aluminum	500	30	0.08
Cherry Wood	500	25	0.08
Anodoized Aluminum	500	30	0.08
Plastic	500	20	0.08
Glass	500	25	0.08
Kraft paper	500	20	0.08
Leather	500	20	0.08
Cloth	500	15	0.08
Rubber	500	60	0.06
Metal	500	/	0.08
Double Color Boards	500	18	0.08
Granite	500	25	0.08
Marble	500	25	0.08
Ceramic Cup	500	25	0.08
Rostone	500	25	0.08
Grip Tape	500	20	0.08

CUTTING

Laser head: 4" Laser Head

Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.5	35	90
Acrylic	2.7	12	90
Acrylic	5.0	8	90
Acrylic	10.0	4.5	90
Acrylic	20.0	1	90
Foam	17.0	12	90
Plywood	4.5	35	90
Plywood	11.0	5	90
Cherry Wood	12.0	7	90
Peach Wood	19.0	4	90
Rubber	4.5	7	90
Cherry Wood	12.0	6	90

ENGRAVING

Laser head: HR laser head

Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	400	15	0.06
Acrylic	500	18	0.04
Bamboo	500	16	0.06
Plywood	400	15	0.06
Cardboard	500	14	0.05
Painted Aluminum	400	20	0.05
Cherry Wood	400	15	0.06
Anodized Aluminum	500	16	0.06
Plastic	400	15	0.06
Glass	500	30	0.06
Kraft paper	500	24	0.06
Leather	500	15	0.06
Cloth	500	18	0.06
Rubber	300	50	0.06
Metal	500	/	0.06
Double Color Boards	500	15	0.06
Granite	500	30	0.06
Marble	500	30	0.06
Ceramic Cup	500	30	0.06
Rostone	500	30	0.06
Grip Tape	500	20	0.06

Cutting and Engraving a variety of plastic

Material	Abbreviation	Trade name
Polyamide	PA	Kevlar®, Nylon®
Polyoxymethylene	POM	Delrin®
Polyester	PES	Thermolite®, Polarguard®
Polyethylene terephthalate	PET	Mylar®
Polyimide	PI	Kapton®
Polystyrene	PS	
Polymethyl-methacrylate	PMMA	Plexiglas®
Polycarbonate	PC	Lexan®, Makrolon®
Polypropylene	PP	
Acrylonitrile butadiene styrene co-polymerisate	ABS	

Please note: All materials are different. These are general suggestions and starting places